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| APPLICATION NO.                                 | F                       | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|---|-------------------------|-------------|----------------------|-------------------------|------------------|--|
| 10/648,305                                      | 10/648,305 08/27/2003   |             | Klaus Junker         | 1415 US                 | 3682             |  |
| 20346   | 7590                    | 05/26/2006  |                      | EXAM                    | EXAMINER         |  |
|   |                         | STEMS, INC. | BOES, TE             | BOES, TERENCE           |                  |  |
| PATENT DEPARTMENT<br>5300 ALLEN K BREED HIGHWAY |                         |             |                      | ART UNIT                | PAPER NUMBER     |  |
| LAKELANI  | LAKELAND, FL 33811-1130 |             |                      | 3682                    |                  |  |
|   |                         |             |                      | DATE MAILED: 05/26/2006 |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.  | Applicant(s)  |  |  |  |  |  |
|--|--|---|--|--|--|--|--|
|  | 10/648,305   | JUNKER ET AL.   |  |  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit  |  |  |  |  |  |
|  | Terence Boes   | 3682  |  |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address<br>Period for Reply  |  |   |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period value of the provision of the prov | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONEI | lely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |  |
| Status   |  |   |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 12 M  | <u>ay 2006</u> .   |   |  |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ⊠ This   | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.   |   |  |  |  |  |  |
| ,  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |   |  |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |  |   |  |  |  |  |  |
| Disposition of Claims  |  |   |  |  |  |  |  |
| 4)⊠ Claim(s) <u>1.6.7 and 15-17</u> is/are pending in the application.   |  |   |  |  |  |  |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |  |  |  |  |  |
| 5) Claim(s) is/are allowed.  |  |   |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1,6,7 and 15-17</u> is/are rejected.   | 6) Claim(s) <u>1.6,7 and 15-17</u> is/are rejected.  |   |  |  |  |  |  |
| 7) Claim(s) is/are objected to.  |  |   |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | r election requirement.  |   |  |  |  |  |  |
| Application Papers   |  |   |  |  |  |  |  |
| 9) The specification is objected to by the Examine   | г.   |   |  |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>27 August 2003</u> is/are: a) accepted or b)⊠ objected to by the Examiner.   |  |   |  |  |  |  |  |
| Applicant may not request that any objection to the  | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |  |   |  |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Ex  | aminer. Note the attached Office   | Action or form PTO-152.   |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |   |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:   |  |   |  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |  |   |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |  |   |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |  |   |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |  |   |  |  |  |  |  |
| * See the attached detailed Office action for a list   | of the certified copies not receive  | d.  |  |  |  |  |  |
| Attachment(s)  | _  |   |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  | 4) Interview Summary<br>Paper No(s)/Mail Da  |   |  |  |  |  |  |
| <ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ul>   |  | atent Application (PTO-152)   |  |  |  |  |  |

### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/12/2006 has been entered.

#### **Drawings**

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the circumferential groove extending into the torsion bar more deeply in a radial direction than the trough or otherwise lowest surface between the gear teeth of the adjacent gear must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. The examiner notes that while figure 11 shows a rolling cylinder capable of forming a groove radially deeper than an adjacent trough of a gear, figures 1-10 do not directly show a groove radially deeper than a trough of a gear.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1,6,7, 12and 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation in claim 1 "...or otherwise lowest surface between the gear teeth..." renders the claim indefinite as it is not clear as to how any surface between gear teeth could be lower than a trough.

## Claim Rejections - 35 USC § 102

3. Claims 1,6,7,12 and 15-17, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Zygutis et al. USP 5,037,038.

Zygutis et al. disclose:

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torsion bar (16)

- gear (26) integral therewith,
- flange (see figure 3 below; (A)) integral with the torsion bar located at an end of the torsion bar with a circumferential groove (B) having generally radially inclined side boundary surfaces (see side surfaces of groove in figure 3 below) in the bar being adjacent to and disposed between the flange and the gear, wherein the circumferential groove extends into the torsion bar more deeply in a radial direction than the trough between the gear teeth of the adjacent gear,
- the circumferential groove having one side boundary surface on the flange and the opposite side boundary surface adjacent to and radially deeper than the trough between the gear teeth of said gear.
- second gear (28) integral with the torsion bar located at another end of the torsion bar
- 4. Regarding the molding process of claims 6,7, and 17, product by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps (see MPEP 2113).

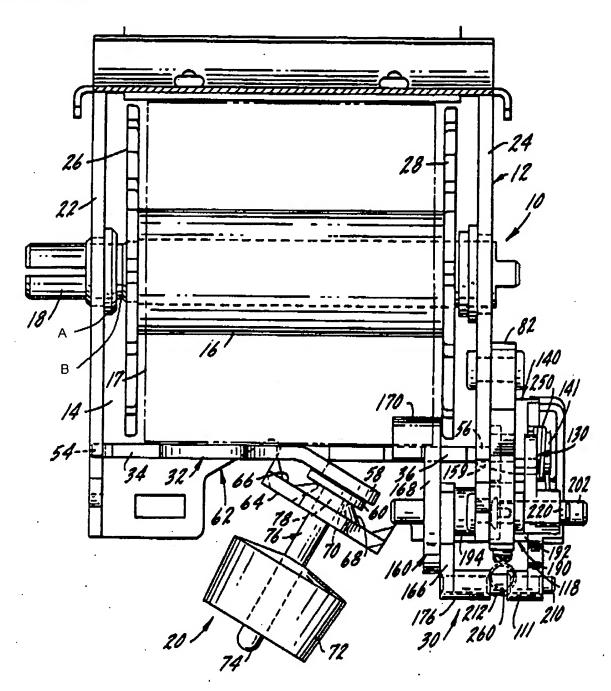


Figure 3

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terence Boes whose telephone number is (571) 272-4898. The examiner can normally be reached on Monday - Friday 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TB 5/24/06

RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER